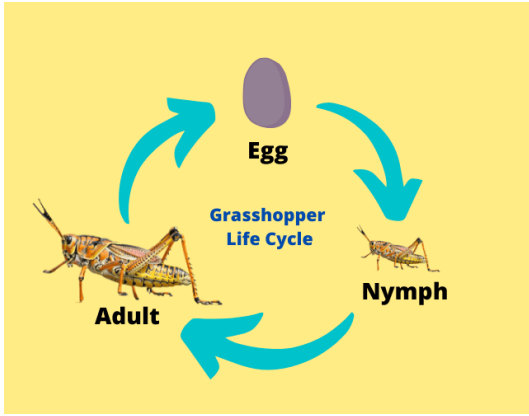


# FIRST TERM

## WEEKLY LESSON NOTES

### WEEK 6

<b>Week Ending:</b> 10-11-2023	<b>DAY:</b>	<b>Subject:</b> Science
<b>Duration:</b> 100mins		<b>Strand:</b> Cycles
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Life Cycles of Organisms
<b>Content Standard:</b> B9.2.2.1 Demonstrate an understanding of the life cycle of grasshopper and assess how their activities affect humans		<b>Indicator:</b> B9.2.2.1.1 Describe the life cycle of the grasshopper as a form of incomplete metamorphosis
		<b>Lesson:</b> 1 of 2
<b>Performance Indicator:</b> Learners can describe the life cycle of the grasshopper and differentiate between incomplete and complete metamorphosis		<b>Core Competencies:</b> Critical Thinking and Problem Solving (CP), Communication and Collaboration (CC) Digital Literacy (DL), Creativity and Innovation
<b>References:</b> Science Curriculum Pg. 91		
<b>New words:</b> Incomplete Metamorphosis, Nymph, Life Cycle, Complete Metamorphosis		
<b>Phase/Duration</b>	<b>Learners Activities</b>	<b>Resources</b>
<b>PHASE 1: STARTER</b>	<p>Display two images side by side: one of a grasshopper nymph and the other of a caterpillar.</p> <p>Ask learners, "How do these two creatures grow into their adult forms?" This serves to intrigue learners about the different forms of metamorphosis.</p> <p>Share learning indicators and introduce the lesson.</p>	
<b>PHASE 2: NEW LEARNING</b>	<p>Provide learners with paper, pencils, and coloring materials.</p> <p>Guide learners in drawing the life cycle of the grasshopper, from egg to nymph to adult. Emphasize the progression and differences at each stage.</p> <div style="text-align: center;">  </div> <p>Using the drawn life cycles, initiate a class discussion about the behavior of grasshoppers at each stage, such as the feeding habits of nymphs versus adults.</p>	Pictures and charts

	<p>Encourage learners to share any personal observations or experiences they've had with grasshoppers.</p> <p>Explain the concept of incomplete metamorphosis using the grasshopper as an example.</p> <p>Contrast this with complete metamorphosis, using examples like the housefly and mosquito. Highlight key differences, such as the absence of a pupal stage in incomplete metamorphosis.</p> <p>Facilitate a discussion on why these different life cycles might have evolved and the potential advantages of each.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. What are the three main stages of the grasshopper's life cycle?</li> <li>2. How does the behavior of a grasshopper nymph differ from that of an adult?</li> <li>3. What stage is missing in the grasshopper's life cycle that makes it "incomplete" metamorphosis?</li> <li>4. Can you name another insect that undergoes complete metamorphosis?</li> </ol>	
<p><b>PHASE 3:</b> <b>REFLECTION</b></p>	<p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>	

<b>Week Ending:</b> 03-11-2023		<b>DAY:</b>	<b>Subject:</b> Science
<b>Duration:</b> 100mins		<b>Strand:</b> Cycles	
<b>Class:</b> B9	<b>Class Size:</b>	<b>Sub Strand:</b> Life Cycles of Organisms	
<b>Content Standard:</b> B9.2.2.1 Demonstrate an understanding of the life cycle of grasshopper and assess how their activities affect humans		<b>Indicator:</b> B9.2.2.1.2 Examine how the activities of the grasshopper affect humans	<b>Lesson:</b> 2 of 2
<b>Performance Indicator:</b> Learners can describe the various activities of grasshoppers and evaluate their effects (both beneficial and harmful) on humans.		<b>Core Competencies:</b> Critical Thinking and Problem Solving (CP), Communication and Collaboration (CC) Digital Literacy (DL), Creativity and Innovation	
<b>References:</b> Science Curriculum Pg. 91			
<b>New words:</b> Grasshopper Activities, Beneficial, Harmful, Impact			
<b>Phase/Duration</b>	<b>Learners Activities</b>	<b>Resources</b>	
<b>PHASE 1: STARTER</b>	<p>Show a short video clip or images of a swarm of locusts (a type of grasshopper) ravaging crops. Pair this with an image of a single grasshopper in a natural setting.</p> <p>Ask, "How can this small insect have such a massive impact?"</p> <p>Share learning indicators and introduce the lesson.</p>		
<b>PHASE 2: NEW LEARNING</b>	<p>Discuss the general behaviors and activities of grasshoppers in their natural habitats, emphasizing their diet, such as feeding on grasses and weeds.</p> <p>Highlight the difference between solitary grasshoppers and gregarious locusts to provide a broader context.</p> <p>Divide learners into groups and assign each group either a beneficial or harmful activity of grasshoppers related to humans.</p> <p>Each group conducts a brief research (using books, internet, etc.) to gather more details on their assigned topic.</p> <p>For instance, one group could research how grasshoppers can serve as a food source in certain cultures (beneficial) while another could delve into their role in agricultural destruction (harmful).</p> <p>Based on the research, each group will brainstorm and list down activities or strategies that either promote the beneficial impacts or reduce the harmful effects of grasshoppers on humans.</p> <p>For instance, for the beneficial aspect of grasshoppers as a food source, a group might suggest promoting grasshopper farming. On the harmful side, suggestions could include natural pest control methods to protect crops.</p>	Pictures and charts	

	<p>Groups present their findings and suggested activities to the class. Facilitate a class discussion to consolidate learning and share different perspectives.</p> <p><u>Assessment</u></p> <ol style="list-style-type: none"> <li>1. What are some typical activities of grasshoppers in their natural environment?</li> <li>2. Name one beneficial impact of grasshoppers on humans.</li> <li>3. How can grasshoppers be harmful to human activities?</li> <li>4. Suggest one activity or strategy to mitigate the negative effects of grasshoppers on agriculture.</li> </ol>	
<p><b>PHASE 3: REFLECTION</b></p>	<p>Use peer discussion and effective questioning to find out from learners what they have learnt during the lesson.</p> <p>Take feedback from learners and summarize the lesson.</p>	